# District Tides

U.S. Army
Army Corps of Engineers

NORFOLK DISTRICT

Summer 2007 www.nao.usace.army.mil Vol. 21 No. 2

## Buoy Deployed!

## Also in this issue...

- Hurricane Tips and Tracking Map
- Craney Island turns 50!
- Ops has one whale of a story

## In this issue...



### From the Cover

Derrick Boat Elizabeth Deckhands Justin Davis and Peter Jeffers remove guide ropes used to place the recently deployed Captain John Smith Chesapeake National Historic Trail buoy into position. (Photo by Patrick Bloodgood)


# Commander's Corner

*Col. Dionysios Anninos*

The Norfolk District is a full-spectrum and diverse district with a tremendous work load across all of our eight Lines of Operations. It will take a focused effort and team work to take up the challenge of executing our programs. As teammates, we are all responsible for executing our ongoing and upcoming programs and it is immensely important that we aggressively set the conditions early for success.

Over this past year, it seems that change has been a constant. Just look at the changes now in our organizational structure, a number of which result from the Corps' regionalization and nationalization efforts, as well as our own initiatives to prepare ourselves as a district to address the increased workloads related to BRAC and our other programs. (See the related story on page 8)

### Key: Adapting to change and flexibility

British novelist, playwright, critic and essayist Arnold Bennett said, "Any change, even a change for the better, is always accompanied by discomforts." We collectively have a great opportunity to dramatically alter the way history reads when it comes to the district's programs and ability to deliver quality products and services on time and within budget, while meeting the standards of "good governance" and customer requirements.

Our strategic plan calls for a targeted effort across our district's priorities: Community Hospital at Fort Belvoir; BRAC/Growing the Force; MILCON/Centers of Standardization and our Civil Works program. Also, we must embrace the changes in our regulatory program (SPGP and Rappanos ruling), work our Real Estate missions and prepare for the FY 08/09 Civil Works workload and Congressional visits. Finally, we will continue to emphasize support for volunteers in support of the Global War on Terrorism (GWOT) and the Gulf Coast recovery effort.

Having said all this, any disaster hitting our area will quickly become the district's top priority to respond and/or execute recovery efforts.

Our Project Delivery Teams (PDT) are the district's center of gravity in all that we do. They build the foundation upon which all products and services are delivered. A PDT's focus is on execution to deliver quality results. The Project Management Plan (PMP) is the team's execution document. We must use these PMP's and embrace execution as a discipline, making it a cornerstone of our culture.

We must think and operate as a partnership or network, where each and every relationship is critical and the players involved depend on each other to accomplish the task. What makes networks successful are TRUST in each other that an action will be completed and COMMUNICATION of risks, expectations and requirements.

Remember, as we bridge the gap from our planned goals/objectives to our final results, we must weigh our decisions' impacts along the way. In the main, the Nike motto "Just Do It" will apply… taking ownership and completing the action without delay. However, delegating the action is another appropriate option, giving it to an expert to complete… but you must manage it until the action is completed. Normally, either of these two actions will apply.

However, delaying an action may be appropriate because it depends on other decisions… but the action and supporting decisions must be tracked, so nothing "falls through the cracks." Finally, there will be actions that you assess are not important to do… that's fine, too, if you are comfortable with that decision.

Having just received status briefings from our nine Employee Objective Teams as they work through the district's vision development process, I am extremely pleased with the district's Visioning efforts as the nine employee teams develop their actionable objectives and identify some exciting initiatives. I think each of us will be proud of these initiatives, which are all geared towards caring for our people, exceeding customer requirements and growing/sustaining our program. I want to thank everyone for their efforts and dedication for improving our district. I assure you all that implementation of the teams' recommendations is a priority for me and the district.

Finally, it is immensely important as teammates, that we take the time to ensure that safety is always on our minds at home and on the job. Please think and live safety!

# Program determines impacts for things that go boom

**Story and photo by Patrick Bloodgood**

Call it 3D-modeling for assessing the worse case scenario. That is exactly what the computer program Blast Effect Estimation Model (BEEM), developed by the Department of Defense, does. It assesses the impacts of bomb blasts on different types of structures from varying distances, determining the effects on human occupants, as well as the structure.

Two, two-day courses given from May 14 to 17 at the Waterfield Building to a select number of employees from the Norfolk District, and other military service organizations, showed the attendees how to use the program to its fullest capability.

Civil Engineer Nandy Perillo learns about the capabilities of BEEM in a hands on course given at the District

"It was an interesting program; to see the blast radius and how it affects the building in a 3-D environment is definitely a great feature," said District Civil Engineer Daniel Reyes.

"The main goal of BEEM is to give people the ability to go out and do assessments of the vulnerability of blasts on their facilities," said BEEM instructor William Seipel, a structural engineer in the Hardened Structures Section of Omaha District's Protective Design Center.

"We had a threat assessment done on the Waterfield Building using BEEM to make sure we were in compliance with regards to force protection measures," said Jim Gorka, Chief of Security and Law Enforcement.

According to the Protective Design Center's website, the potential applications for BEEM include: assessing threats to facilities; its use as a design tool for retrofitting buildings; performing vulnerability assessments; investigating bombing events; force protection planning; access control point planning; base camp design; and planning sites for new construction.

The program is rated "For Official Use Only" (FOUO) available for use only by federal employees and government contractors with a specific need for the program.

## District Safety

# Summer days are quickly approaching; stay cool to stay alive

**Story by Ricky Brown**

When the body is unable to cool itself by sweating, several heat-induced illnesses such as heat stress or heat exhaustion, and the more severe heat stroke, can occur. These illnesses, if not identified and treated, can result in death.

The factors that lead to heat-induced illnesses are high temperature and humidity; exposure to direct sunlight; limited air movement; physical exertion; poor physical condition; some medicines and inadequate tolerance for hot workplaces.

There are plenty of ways to avoid becoming ill in the hot sun. First you should know the signs and symptoms of heat-related illness; monitor yourself and coworkers; block out direct sun or other heat sources; use cooling fans and air-conditioning; rest regularly, make sure you drink lots of water, about one cup every 15 minutes; wear lightweight, light colored, loose-fitting clothes and avoid alcohol, caffeinated drinks, or heavy meals.

Symptoms of Heat Exhaustion

- Headaches, dizziness, lightheadedness or fainting.
- Weakness and moist skin.
- Mood changes such as irritability or confusion.
- Upset stomach or vomiting.

Symptoms of Heat Stroke

- Dry, hot skin with no sweating.
- Mental confusion or losing consciousness.
- Seizures or fits.

If you are experiencing or see somebody who is experiencing a heat-induced illness you need to call 911 and a supervisor immediately. While you are waiting for emergency personnel to arrive attempt to move the worker to a cool, shaded area; loosen or remove heavy clothing; provide cool drinking water and fan and mist the person with water.

Engineer's Day

Thursday, June 14

Great Bridge Reservation

IS COMING SOON!

**Captain John Smith Chesapeake National Historic Trail**

# District places first-ever water trail buoy

The crew of the Elizabeth lowers the new buoy in to position on the James River.

**Story and photos by Patrick Bloodgood**

Brisk spring winds, overcast sky and a medium chop on the water greeted the crew of the Norfolk District Derrick Boat Elizabeth as they transported the first-ever national water trail buoy to its final location on the James River, just off shore of historic Jamestown, Va. The crew of the Elizabeth, at the request of the National Oceanic and Atmospheric Administration (NOAA), used the vessel, their know-how and their crane to position the buoy marking the Captain John Smith Chesapeake National Historic Trail within five feet of their predetermined global coordinates; a feat that did not go unnoticed by the NOAA official overseeing the buoy's placement.

"I don't know if we are going to be able to find another crew for the other two buoys, with as much knowledge and professionalism that this one on the Elizabeth has," said Doug Wilson, program manager of the NOAA Chesapeake Bay Office's Integrated Coastal Observations Program.

Due to prior operational commitments, a scheduled maintenance period and distance away from the Norfolk District, the Elizabeth will not be available for use when the other two buoys will be placed to mark the water trail along the other tributaries of the bay.

"We extended our maintenance start date to allow for the first buoy and another geo-technical job in Richmond, Va. I just couldn't extend it any further; it would have been nice to help on the other two buoys though," said Hazards to Navigation Coordinator Steve Baum.

The historic trail itself marks the path that Captain John Smith took when he explored the Chesapeake Bay in 1607 and 1608, shortly after the first English settlement was established in Jamestown, Va. The launch of the trail coincides with the 400th anniversary of that settlement and the festivities that the Commonwealth of Virginia is conducting.

Much like a hiking path with markers, the buoys serve as a visual reference point for mariners to guide by. They also, come with some very sophisticated equipment making them interactive. With state-of-the-art, near-real time internet up-linking capabilities, the buoy transmits information about water temperature, air temperatures, water quality and wind direction and speed.

According to NOAA's Chesapeake Bay office the buoys will serve as interpretive guide posts, linking trail visitors--whether they be right next to the buoy or at home on their computer--with information about the buoy location. Interested parties can go to the Web site www.buoybay.org or call 1-877-BUOY-BAY, to hear current data collected by the buoy, hear about conditions in John Smith's time and learn about the local history.

Glen Boykin, the Derrick Boat Elizabeth's mechanic, releases the Captain John Smith Chesapeake Water Trail buoy's anchor chain from the side of the Elizabeth as Deckhand Peter Jeffers looks on.

*District Tides* is an unofficial publication authorized under the provisions of Army Regulation 360-1. It is published online quarterly for the employees of the U.S. Army Corps of Engineers, Norfolk District as well as circulated via print to approximately 130 different stakeholders, customers, partners and elected officials. Editorial views and opinions expressed are not necessarily those of the Corps of Engineers or the Department of the Army. Inquiries, comments and submissions can be sent to, U.S. Army Corps of Engineers, Norfolk District, 803 Front Street, Norfolk, Va. 23510 or by e-mail to patrick.j.bloodgood@usace.army.mil. To reach the staff by phone (757) 201-7606.

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# Fort Monroe Seawall repair resumes

**Story and photos by Jerry Rogers**

After a nearly two-year pause, the Norfolk District, is now in full military construction mode to complete work initiated in 2003 on the Fort Monroe Seawall Repair and Improvement Project. The $20 million flood damage reduction project was awarded Feb. 27 to Waterfront Marine Construction Inc., based in Virginia Beach, Va., with project completion set for early summer of 2009.

The Fort Monroe Seawall Repair and Improvement Project was suspended by the U.S. Army in July 2005 when Fort Monroe was included in the 2005 Base Realignment and Closure (BRAC) legislation. The project was reauthorized by the Office of the Secretary of Defense in November 2006.

The new seawall will be built in front of the existing structure to a uniform 9.5-foot elevation from its current average 7.5-foot elevation. The project repairs deficiencies and improves flood protection for Fort Monroe from a 5-year level – a storm that has a 20 percent chance of occurring in any given year – to a 25-year level, a storm that has a four percent chance of occurring in any given year. Hurricane Isabel in 2003 was estimated to be approximately a 40- to 50-year event. Its peak storm surge elevation at nearby Sewells Point was measured at 6.25 feet.


The seawall project includes a new coated steel sheet-pile seawall with a reinforced-concrete cap immediately on the water side of the existing seawall. Additional stone protection will be provided at the toe of the new seawall to protect it from wave erosion. New sidewalks, drainage improvements, an operable flood gate at the Engineer Pier and other related site work are included. The seawall will extend from the existing concrete pier west of the Chamberlin Hotel to just beyond the fishing pier, located behind Battery Parrott on Fenwick Drive. This project will also include a terminal groin, a coastal engineering structure designed to prevent beach erosion; three breakwaters or jetties; and sand beach nourishment from the fishing pier northward for about 1,850 feet.

"During Hurricane Isabel, the storm surge caused significant damage to the seawall and there was major flooding across the post, including the area inside the moat," said Project Manager Greg Hegge. "Initial work under this project began in the winter of 2003, immediately after authorization in the form of a supplemental appropriation bill was passed by the Congress and signed into law by the President."

A construction crew from Waterfront Marine Construction, Inc. preps the existing jetty, located just northeast of Battery Parrot on the Fort Monroe Seawall, in advance of construction of the new Breakwater #1, which will be built on the end of the jetty.

After Hurricane Isabel passed, Norfolk District assisted the Fort Monroe Directorate of Public Works (DPW) with initial response activities and repairs. The rapid response for critical repairs, as well as planning the long-term solutions, were carefully orchestrated and executed by the Norfolk District, the Monroe DPW, and the 509th Dive Detachment (stationed at Fort Eustis), explained Hegge.

As the initial on-site work began, Norfolk District also began a comprehensive Flood Evaluation and Protection Study, which was completed in May 2005 and formed the technical basis for this Seawall Repair project.

Unlike a traditional civil works flood damage reduction project, this military construction project provides the best attainable balance between function, environmental impact and cost, based on funding approved by Congress, said Hegge.

"While the Seawall Repair and Improvement project and related works will provide significant improvements over the existing flood protection system at Fort Monroe," said Hegge, "there remains a flood hazard to the post, particularly from storms like or more intense than Hurricane Isabel."

# 2007 Hurricane Tracking Chart

## Hurricane Safety Preparations

•Discuss the type of hazards that could affect your family. Know your home's vulnerability to **storm surge**, **flooding** and **wind**.

•Locate a safe room or the safest areas in your home for each hurricane hazard. In certain circumstances the safest areas may not be your home but within your community.

•Determine escape routes from your home and places to meet. These should be measured in tens of miles rather than hundreds of miles.

•Have an out-of-state friend as a family contact, so all your family members have a single point of contact.

•Make a plan now for what to do with your pets ifyou need to evacuate.

•Post emergency telephone numbers by your phones and make sure your children know how and when to call 911.

•Check your insurance coverage - flood damage is not usually covered by homeowners insurance.

•Stock non-perishable emergency supplies and a Disaster Supply Kit.

•Use a NOAA weather radio. Remember to replace its battery every 6 months, as you do with your smoke detectors.

•Take First Aid, CPR and disaster preparedness classes.

•Create a supply checklist.

•If you have to evacuate, know the routes you will take and have a predetermined destination to stay.

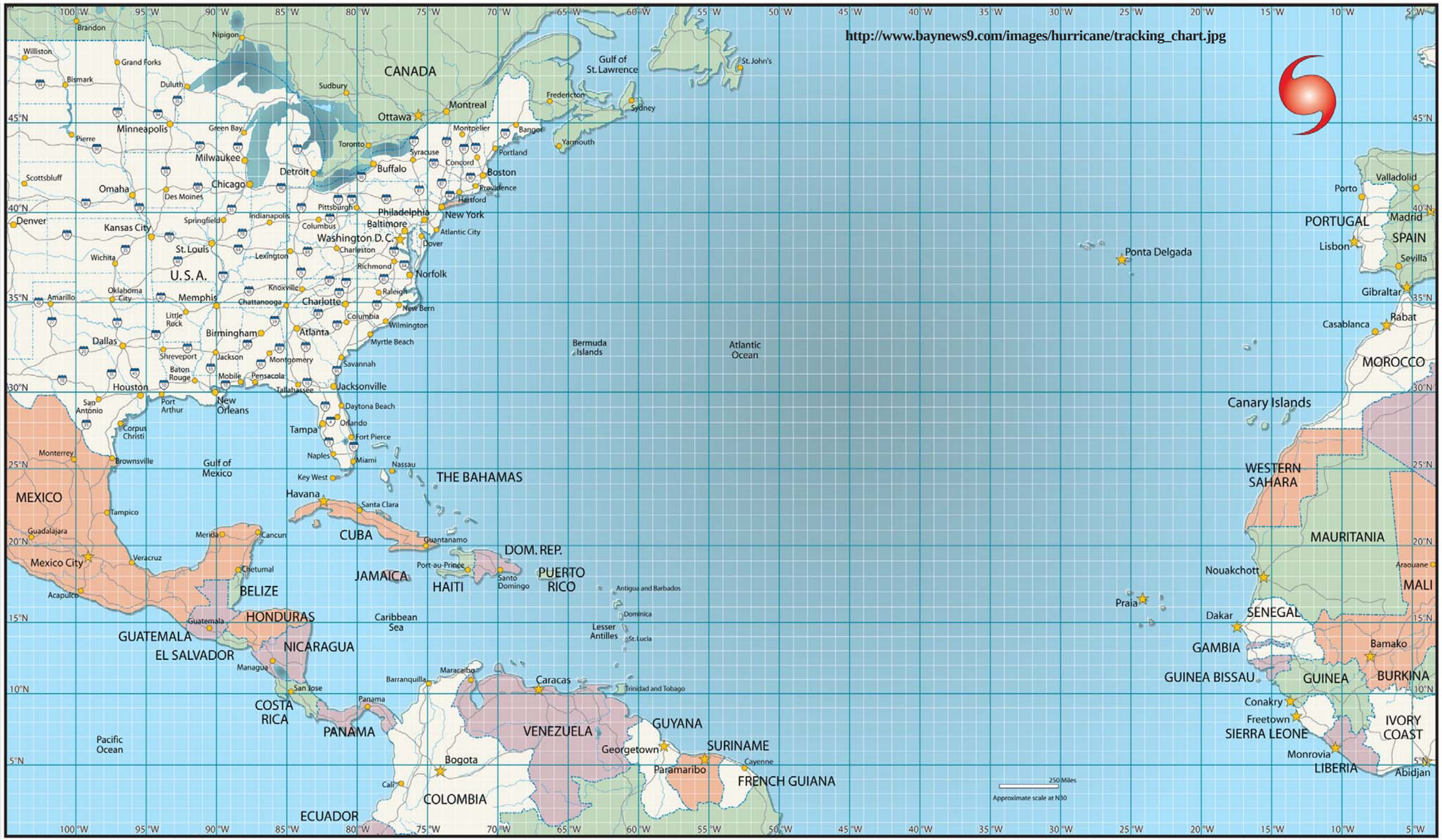
•Take the proper steps to secure your home; board up windows secure lawn furniture.

**For more information and tips go to the National Hurricane Center's Web site at,**
**http://www.nhc.noaa.gov/HAW2/english/disaster_prevention.shtml**

## 2007 Storm Names

| | | | |
|---|---|---|---|
| Andrea | Felix | Karen | Pablo |
| Barry | Gabrielle | Lorenzo | Rebekah |
| Chantal | Humberto | Melissa | Sebastien |
| Dean | Ingrid | Noel | Tanya |
| Erin | Jerry | Olga | Van |
| | | | Wendy |

http://www.baynews9.com/images/hurricane/tracking_chart.jpg




A larger map for saving seperately is located on the District's PAO SharePoint site.

# Construction of Distributed Common Ground Station to start soon

**Story by Jerry Rogers**

After winning the Air Combat Command's 2007 Design Citation Award, Norfolk District is ramping up to manage the construction of the celebrated 148,500-square-foot Distributed Common Ground Station (DCGS) facility at Langley Air Force Base, Va. The $38.7 million military construction project was awarded May 7 to S.B. Ballard Construction of Virginia Beach, Va., with scheduled completion date in August 2009.

Artist rendering of the new DCGS building at sunset. The groundbreaking is scheduled for June 19.

The evolutionary intelligence, surveillance and reconnaissance (ISR) system, known as DCGS, is a globally dispersed, wide area network of fixed and mobile ground processing systems for data collected from high-flying manned and unmanned aerial vehicles and satellites, of which the Predator, Global Hawk, and U-2 are the most familiar.

The main function of the system is to receive intelligence feeds from multiple sources at a common ground station. The data is then processed, stored, correlated, exploited and disseminated to Air Operations Centers (AOCs) to enable time-critical strikes.

The new DCGS, which will be operated by the 480th Intelligence Wing of the ACC, will feature operational space for a 350-person intelligence and support element, permanent installation of multiple ISR ground sensor platforms, and all the associated command and control and redundant utility systems required for continuous operations under any contingency.

The Norfolk District is extremely proud to be given the mission to build the new DCGS, said Project Manager Doug Martin. "We have assembled a multi-disciplined team (both Air Force and the Corps) of talented, technically skilled and dedicated professionals to execute the project. The prime contractor, S.B. Ballard, is a quality general contractor with a fine track record of building diverse facilities for the Army Corps of Engineers. Our focus is to deliver a quality project, on time, and within budget. Our tools will be continuous team building and regular and frequent communications between the team and our contractor," stressed Martin.

# USACE initiatives, workloads cause district realignments

**Story by Terry McCann**

A number of changes result from USACE regionalization, streamlining and cost-saving initiatives. The impending challenges of BRAC and other additional workload requirements have also driven significant changes to help the district meet future challenges.

### Information Management & Technology (IM/IT)

The recently concluded USACE-wide IM/IT A-76 competitive process will have some noticeable affects on all of us in the district, as well as USACE-wide. As a result of this process, the Corps will now receive its full range of IM/IT services from a Most Efficient Organization (MEO) structure called Army Corps of Engineers Information Technology (ACE-IT). This ACE-IT will be comprised of a combination of in-house full-time federal employees, as well as contracted resources. As with any organizational change that occurs, this new structure and transition will pose some personal challenges and change, especially for our dedicated IM/IT employees.

For our IMO employees, it will mean that their staff will be reduced significantly, from 13 full-time positions to just five: one GS-12/13 IT Customer Relations Manager; one GS-11 Data Management IT Specialist; one GS-9 Information Product Coordinator; one GS-9 Records Manager; and one GS-9 Property Survey Coordinator. Three contractor positions will also be included in the district's new ACE-IT structure and will be housed in the Waterfield Building.

In conjunction with the transition to the ACE-IT structure, Deborah Kennedy returns to the district as the new Regional Information Officer (RIO) for both Norfolk and Wilmington Districts. She will be housed in the Waterfield Building beginning in June and will have regional oversight and coordination responsibilities, under the Corps of Engineers Corporate Information (CECI) structure, as she supports both Norfolk and Wilmington districts.

Employees should anticipate some adjustments and growing pains as the system adjusts to the new structure and manner in which they receive technical support.

However, according to Cheryl Fromme, acting BRD chief, "the new organization is committed to providing the necessary support to ensure Norfolk District will succeed with its missions." For more information on the IM/IT A-76 results, go to the ACE-IT website, https://aceit.usace.army.mil.

### Logistics Management

The office you've known as LMO will now become an LDP, or Logistics Delivery Point, under a regional/national based logistics management and support structure called the ULA, or USACE Logistics Activity.

Norfolk District is now implementing a USACE Logistics High Performance Organization (HPO) review that was completed last August. This means that we will now begin to see some changes in our local business processes and, in general, the way we do business in the logistics arena within USACE. This includes changes in the LMO operation within Norfolk District. While we'll still have the same super employees providing the district with its facilities management and logistics support, the logistics management reporting structure itself will change, with our logistics staff no longer

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# *Continued:* Changes abound in district offices

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reporting through the district chain of command. It will now be "stove piped" under the ULA national management and reporting structure.

### Contracting Office

Information Management and Logistics Management aren't the only district offices going to more of a regional/national structure. Our colleagues in the Contracting Office have just done the same thing. While we won't lose any of our Contracting employees from the Waterfield Building and will still continue to receive our contracting advice and services from them, their reporting structure will be changing to one which will be part of a national structure called the National Contracting Organization (NCO) versus being a district office.

In a very simplistic explanation of a complex national contracting structure, the District Contracting Office supporting us here at Norfolk District will report directly to a Regional Contracting Chief (RCC), who is co-located at our North Atlantic Division (NAD) headquarters. So, instead of the standard district – division – USACE headquarters reporting chain that our contracting staff had become accustomed to, District Contracting Chief (DCC) Cheryl Drum and her staff will actually be a field element of the Regional Contracting Office reporting to the RCC.

Drum states that she is "committed to this change being transparent to the district." For more specific information on the PARC's responsibilities and those of other elements of the new National Contracting Organization contact Cheryl Drum… or you can wait for the NCO's new website which will be unveiled on June 13.

### Resource Management (RMO)

Norfolk District's RMO now reports directly to the district commander, having most recently been a part of the Business Resources Division (BRD). The move that was effective May 13, was made to enable the district's Chief Financial Officer (CFO) to more closely advise the commander on significant CFO issues, fiscal law and resource utilization questions, and internal control and regional financial management issues. The change was also precipitated by RMO's increased involvement in new district mission planning, including BRAC projects, as well as regional resource planning initiatives and processes. For additional information, contact Mark Camsky.

### P3MD Projects Branch

Spurred by the challenges of BRAC and anticipated project requirements, the Projects Branch of the Planning, Programs and Projects Management Division (P3MD) reorganized on May 18. Four new section chief positions have been created and its branch employees were aligned into one of four sections: Civil Works, Military Construction, Environmental and Special Projects. Designed to provide clearer roles, responsibilities and points of entry for the district's customers, clients and partners, this change will enable the branch's staff to better focus on their specific technical areas, achieving greater technical excellence. The change will also facilitate mentoring, cross-training and career development for project managers and project management specialists as well as enable managers to be more focused on the needs of their employees.

The four section chiefs will be technical supervisors and subject matter experts, as well as serve as program managers for their respective section programs. They'll also perform as project managers on projects, as well as supervise the employees assigned to their section. These new supervisory positions are expected to be filled competitively with the sections operational by Oct. 1.

# Craney hits 50 with no retirement in sight

**Story by Nancy Allen**

During the war of 1812, Craney Island, Va. played a very large role in ensuring the United States' victory over Britain. The U.S. military had built a seven-gun fortification on the land, and on June 22, 1823, the Battle of Craney Island took place. 81 British troops (of an estimated 1300) were killed, with no losses to the American's 730-man-force. The victory at Craney Island saved Norfolk and Portsmouth from being captured and pillaged by the enemy.

This photo taken on Dec. 22, 1955, shows the initial building of the dikes at Craney Island. (File photo)

Today, nearly 200 years later, Craney Island is equally important to the success of Norfolk, Portsmouth and the entire Hampton Roads harbor as a placement area for the millions of cubic yards of dredged material that are removed from the region's channels every year.

During the 1940's it became evident that the dredged material placement areas in the harbor's natural deep waters would be depleted in a matter of a few years. Faced with the prospect of having to haul all dredged material to the Atlantic Ocean channel at greatly increased costs, the Norfolk District was directed by Congress to study the problem.

The original Craney Island site had been used as a dredged material disposal area for many years, but that site had been filled to capacity and deposits were being extended to lands west of the island, which had been acquired by the Fifth Naval District. Norfolk District employee Harold Waterfield is credited with devising plans for what is now known as the Craney Island Dredged Material Management Area (CIDMMA).

The district's plans, authorized by Congress in 1946, called for a toll-disposal dredge area of approximately 2,500 acres. The area selected was away from established lanes of navigation and fronted

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# Cars shake up water, stir wonderment in district


**Story and photos by Patrick Bloodgood**

Just like a scene from the popular James Bond movie franchise, Norfolk District recently played host to cars driving into the water, folding their wheels up and then speeding off, sending a trail of white, frothy churned water into the air at 30 mph. Unlike James Bond, however, there were no martinis to have shaken (not stirred), nor were there henchmen trying to take over the world; only a handful of curious district employees watching in wonder as hybrid sports cars, humvee-looking vehicles and Quad bikes rolled from the district's parking lot down the boat ramp and into the Elizabeth River on Apr. 18.

The vehicles, built by British company Gibbs Technologies, were being tested and shown by its American partner, U.S. technology giant Lockheed Martin, for use in U.S. military applications. As part of the testing and showcasing of the high-speed watercraft technology, Lockheed Martin brought the vehicles to the Norfolk District to use the boat ramp and easy access to the Elizabeth River, much to the delight and awe of the many onlookers who stepped away briefly from their desks to see sports cars speed around the river.

"What we are showing today is proven prototypes, meaning that they have been extensively tested and we know the technology works," said Scott Rudder, senior manager of New Market Initiatives for Lockheed Martin. "Now we are going to be designing vehicles for the military based on this high-speed technology."

Rudder thanked the district for the use of their boat ramp. Last week, Lockheed Martin unveiled the vehicles and their capabilities during a media event for the general public. For the district it was an advance premiere showing to check out, as one employee put it, "cool vehicles."

# District, state change SPGP review process

**Story by Terry McCann**

Change is not always easy and the district's Regulatory staffers and the public will soon begin seeing changes in the way some permitting actions are done between Norfolk District and the Commonwealth of Virginia relating to the federal State Programmatic General Permit (SPGP). On June 1, the district and the Commonwealth's Department of Environmental Quality (DEQ) signed an agreement to work cooperatively in implementing the SPGP program stemming from the state's request of Norfolk District to increase the acreage limits for which the state would be the primary reviewing authority.

This agreement and recently approved SPGP authorization relates to projects that have non-tidal waters and wetlands impacts up to one acre in size and 2,000 linear feet of streams for development projects, and up to one-third acre for roads projects. With this agreement, the Commonwealth will be primarily responsible for reviewing the roughly 425 development and transportation projects per year that qualify for the SPGP in Virginia, making up approximately ten percent of the Norfolk District's annual permit workload. Additionally, in conjunction with permit applications, the DEQ will now conduct initial screenings for threatened and endangered species.

In its initial request, the State had requested an even higher acreage threshold than has now been permitted. Subsequent negotiations between the district and Commonwealth resulted in the two entities pursuing a middle-ground to enable the district to help prepare DEQ regulators to assume the additional responsibilities.

### A more efficient process

Prior to this agreement, developers and transportation planners whose projects affected non-tidal waters under SPGP had to wait to receive a permitting letter from the Army Corps of Engineers as well as to receive a State Water Protection Permit from the DEQ. Each agency was independently responsible for monitoring to ensure compliance with permitting provisions. Now, these developers and planners are required to obtain permits only from the DEQ.

This has been an issue of some contention within the district. But, in the final analysis, while the district will continue to retain oversight and management responsibility for this federal program and monitoring for consistency with federal laws and guidelines, this SPGP now enables the Corps and DEQ to take a significant step forward toward a more efficient process. It provides the state more control over certain development activities, better enables a "one-stop shopping" approach for commercial and residential developers as well as transportation planners, and also eliminates or reduces duplication of effort between the district and the DEQ. It will also enable the district to use its available resources to focus more extensively on compliance and enforcement.

Now, it will be the district's and state's responsibilities to work together to ensure the more streamlined permitting process works effectively and serves the needs of the community.

# CIDMMA, celebrates 50 years in existance

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on undeveloped waterfront property adjacent to the original Craney Island.

It took eight years of site analysis, engineering studies and specifications, contractual arrangements and funding mechanisms before construction on the estimated $6.2 million Craney Island project could begin.

### Construction begins

Construction of the facility, then known as the Craney Island Fill Area, began on August 19, 1954, with the west dike first, followed by the north dike extending from west to east. The dikes were constructed by hydraulic fill with sand from adjacent bottom areas and shaped by dragline cranes into the desired sections.

Once the hydraulic pumping on the west dike had been completed and work on the north dike had begun, another dredge began working on the east dike on January 1, 1956. Some 11 months later, the first dredge had completed the north dike and turned the corner onto the east dike and by January 1, 1957, the two dredges were approximately 100 yards apart.

Dredgedmaterial is pumped in to Craney Island's containment cells where the sediments are deposited through gravity and clean water flows back to the river. (File photo)

The final 100 yards turned out to be the most difficult part of construction. Because of the tidal fluctuation, twice a day a large quantity of water would enter the disposal area on the flood tide and then pour out of the opening on the ebb tide. For eight days the working crews and the two dredges, one pumping from the inside and the other from the outside, fought the onrush of water, pumping sand and throwing sandbags, trees and other objects into the gap. At 12:45 a.m. on January 8, the closure was completed.

During the last months of construction on the dikes, work was begun on the rehandling basin, a disposal area outside the main footprint of the CIDMMA that would allow deposits of material that could not be pumped directly into the main facility. A basin large enough to hold 1,000,000 cubic yards of material was dug out adjacent to the Norfolk Harbor channel.

### 50 Years of operation

The engineering principle behind Craney Island has remained mostly unchanged for 50 years. Material dredged from channels in the Hampton Roads harbor is pumped by a hydraulic dredge into the east side of Craney Island. The material then flows down-slope to the west, depositing the heaviest particles first. Spillways on the western sides allow the release of water after sediments have settled out. The clarified water is then returned to the James River through outflow pipes.

Because it was the first of its kind and incorporated unique design features, large size and successful operation, Craney Island became a prototype for similar facilities. And it far outlived its original predicted life span of 20 years – a 1976 Congressional law mandated extending the useful life of disposal facilities throughout the United States and Norfolk District began to examine ways to increase the useful life of Craney Island. A feasibility study concluded that one way to increase capacity would be to slowly raise the dikes in increments, allowing them to stabilize as the level of dredged material increased inside.

A 1981 management plan called for many practices to increase the facility's life, including: new spillways, completion of the cross-dikes that would divide Craney Island into three cells, annual rotational use of the containment cells, more active dewatering by increased ditching, continuing to raise the dikes, installing strip drains and use of geotechnical fabric to strengthen dike foundations. Construction of the north and south division dikes was completed in 1984.

By 2006, Craney Island had received more than 230 million cubic yards of dredged material – more than twice the amount of 96 million cubic yards of material the Corps once believed the facility could hold! The facility's centralized location provides a low-cost option for material dredged from the areas navigation channels, as well as from private dredging projects. Several of the maritime industry's most recent projects, including the 50-foot in-bound channel and the APM Maersk terminal in Portsmouth, Va., may not have been possible without the CIDMMA.

### Benefits extend beyond Capacity

Almost since the facility was first constructed, Craney Island has been considered a prime spot for a new marine state-owned port facility, to compliment terminals in Norfolk, Portsmouth and Newport News. In 2006, the Corps concluded a nearly 10-year study with the Port of Virginia that called for construction of a fourth, 580-acre dredged material cell, to be located on the eastern side of the facility. The cell will then be turned over to the Commonwealth of Virginia for construction of a new marine terminal.

Craney Island is not simply an economic asset to the region – it is also known as one of the finest fishing spots in the Hampton Roads region and many migratory birds use this area as foraging and breeding grounds.

This year, as the Norfolk District celebrates 50 years of operating the Craney Island Dredged Material Management Area, the facility serves as a reminder of a pivotal military victory, a repository for millions of cubic yards of material dredged from Hampton Roads' vital navigation channels, a recreational treasure for visitors from near and far and, perhaps most importantly, the region's key to economic development in the 21st century.

*(Editor's Note: Portions of this article were adapted from two articles originally published in Military Engineer magazine and authored by officers from the Norfolk District: "Craney Island Disposal Area," March – April 1957, Col. R. B. Warren and "Craney Island Disposal Area, 1954 – 1969," September – October 1969, Lt. Col. William L. Horn)*

**One whale of a story**

# District supports Stranding Team during whale necropsy

**Story and photos by Patrick Bloodgood**

It was one whale of a Monday, March 26, for many Norfolk District operations staff members. It all began the night before for Steve Baum, the district's hazards to navigation coordinator, when his phone rang with reports that a dead whale was floating in the water near the Lamberts Point section of Norfolk, Va.

The following morning an extensive cooperative effort was launched to first remove the whale obstruction from the federal shipping channels, and then to figure out an area where the Virginia Aquarium's Stranding Team, based in Virginia Beach, Va., could take possession of the animal and perform a necropsy, the animal equivalent of a human autopsy.

After consultation with state and federal agencies, it was determined that the Norfolk District and the U.S. Coast Guard would be the responsible parties to remove the approximately 60-foot-long, 20-ton female fin whale, and tow her over to the district's Craney Island Dredged Material Management Area. There the Stranding Team would perform their autopsy and then bury the mammal on site.

Employees at Craney Island use heavy equipment to drag the dead whale on to the shore.

Fin whales are an endangered species with an estimated 123,000 left on earth. They are known as the greyhounds of the sea because of their quick speed and fast diving ability. The whales are predominately found in the southern hemisphere with a small number residing in the northern hemisphere. According to officials at the Virginia Aquarium, there have been a number of recent whale sightings off the coasts of Virginia and North Carolina.

"In my 10 years as captain of the [Corps Patrol Vessel] Mobjack, I have seen whales in the channel, but never dead. This is definitely a first," revealed Norfolk District Vessel Captain Norm Harris.

The Corps Patrol Vessel Mobjack served in a supporting roll, escorting the crew of a Portsmouth, Va. based 41-foot Coast Guard Utility Boat to Craney Island with the whale in tow.

When the Stranding Team arrived, personnel from Craney Island used a heavy equipment tracked-excavator to drag the mammoth sea dweller onto the beach where the necropsy would take place and become the final resting spot for the deceased mammal.

Initial investigation by the Stranding Team yielded observations consistent with the female fin whale being struck and killed when it came into contact with a large shipping vessel. Abrasion marks on the whale indicated it was subsequently dragged on the bow of the ship until it reached the Hampton Roads Harbor.

Having the full support of the Norfolk District proved to be a blessing for the Stranding Team.

"Letting us use your facility was fantastic," said Susan Barco, Stranding Response coordinator for the Virginia Aquarium's Stranding Team. "We really appreciate all that you've [the Norfolk District] done for us. Usually we have to beg, borrow and steal to get heavy equipment in during a stranding, so having access to your operators and equipment has made life so much easier."

The relatively secure and remote location of Craney Island also provided an ideal situation for the Stranding Team, who typically has to cut apart the mammal, take blood and urine samples, as well as blubber samples in plain view of the general public.

"A floating dead whale is something that people generally don't want in their backyards, so doing this out of the direct view of the public was very nice," said Barco.


Members of the Virginia Aquarium's Stranding Team look on as employees from the district's Operations Branch work to bring the whale up onto shore.